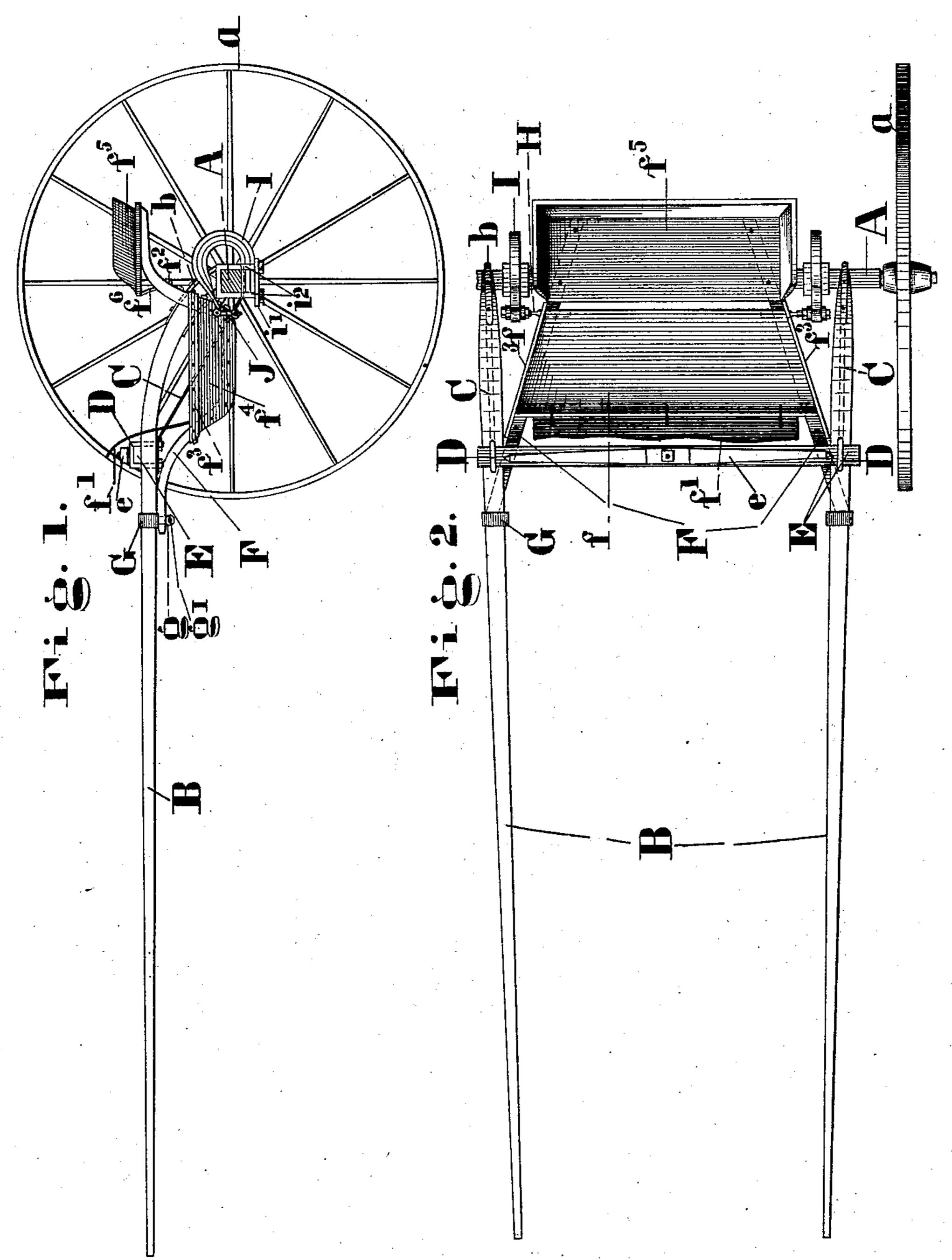
P. WINEMAN. TWO WHEELED VEHICLE.

No. 281,328.

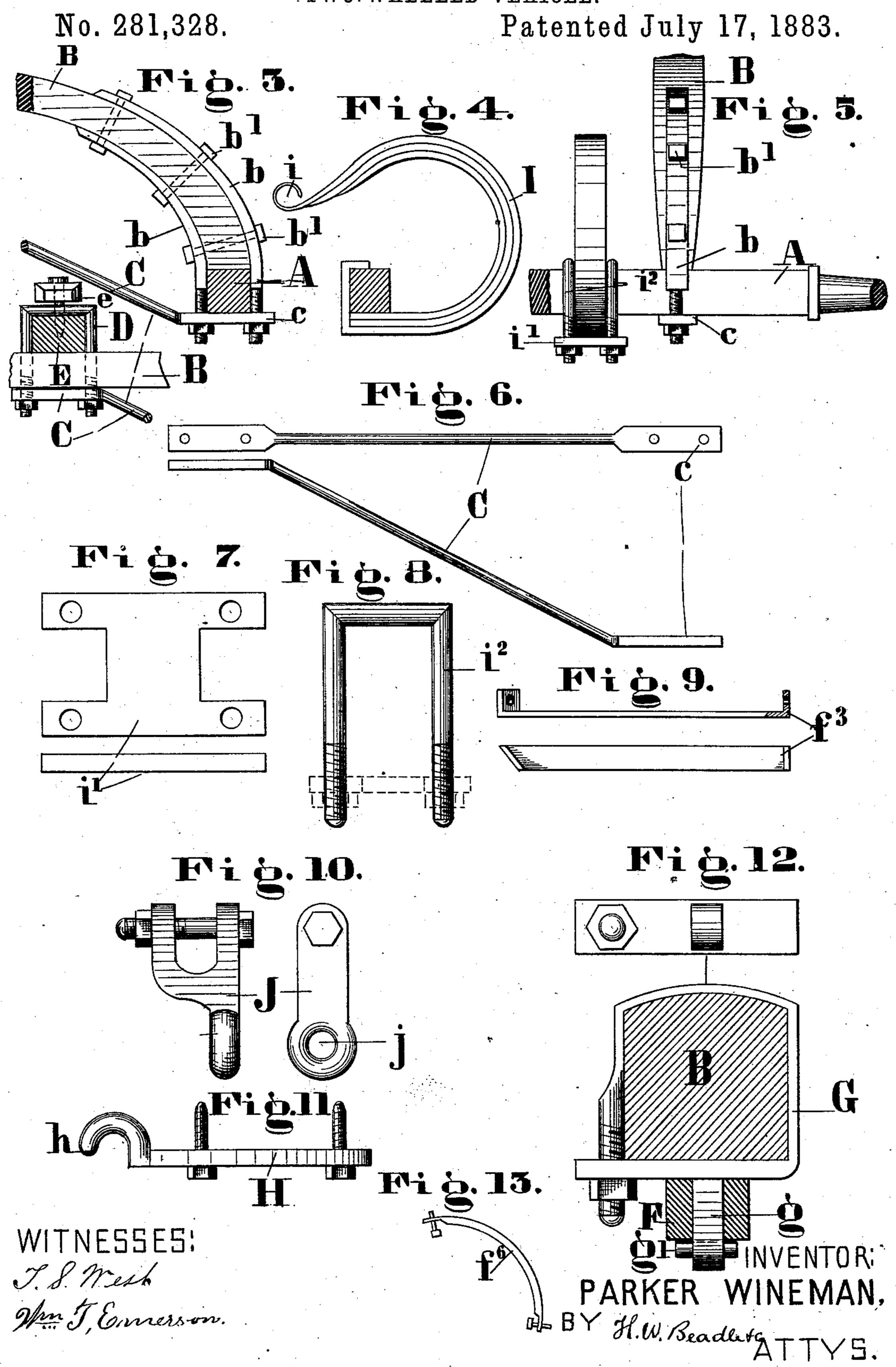
Patented July 17, 1883.



WITNESSES! Thesh When J. Emerson. INVENTOR:
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ATTYS.

P. WINEMAN.

TWO WHEELED VEHICLE.



N. PETERS, Photo-Lithographer, Washington, D. C.

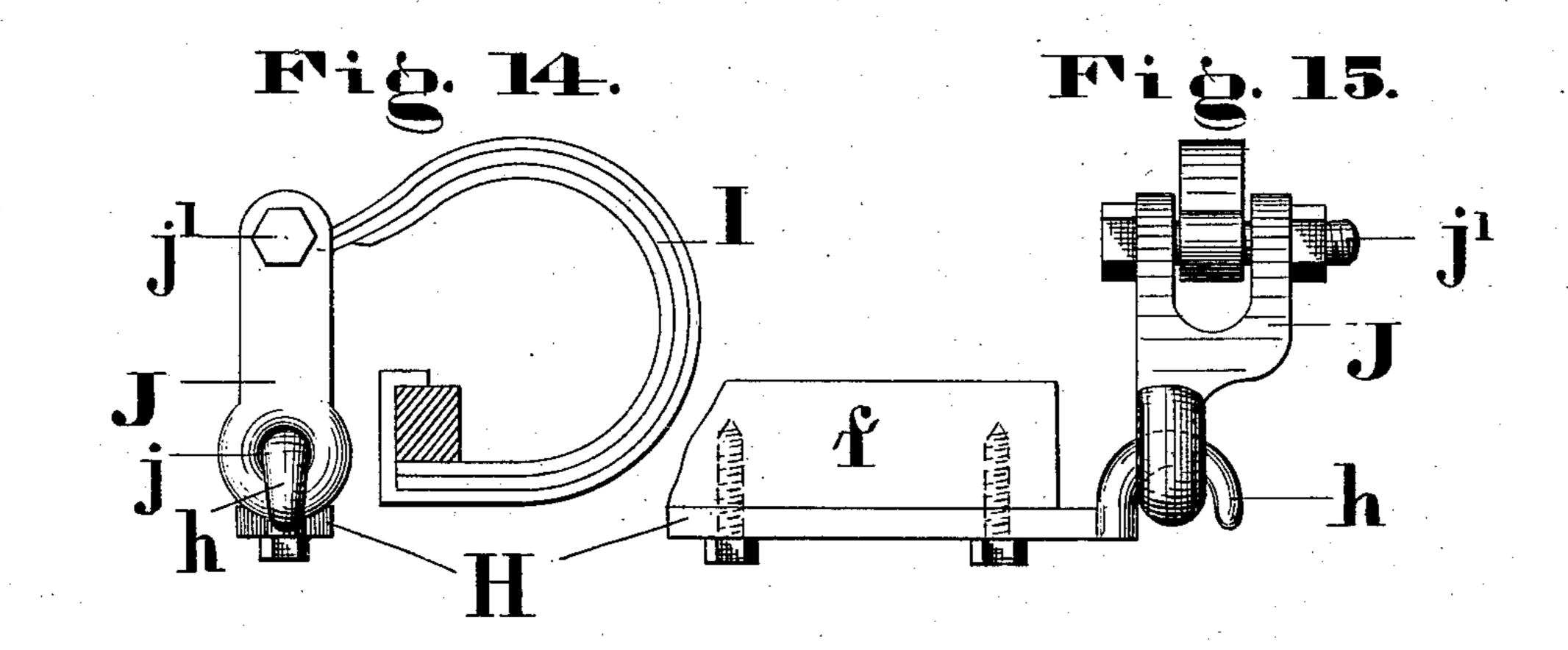
(No Model.)

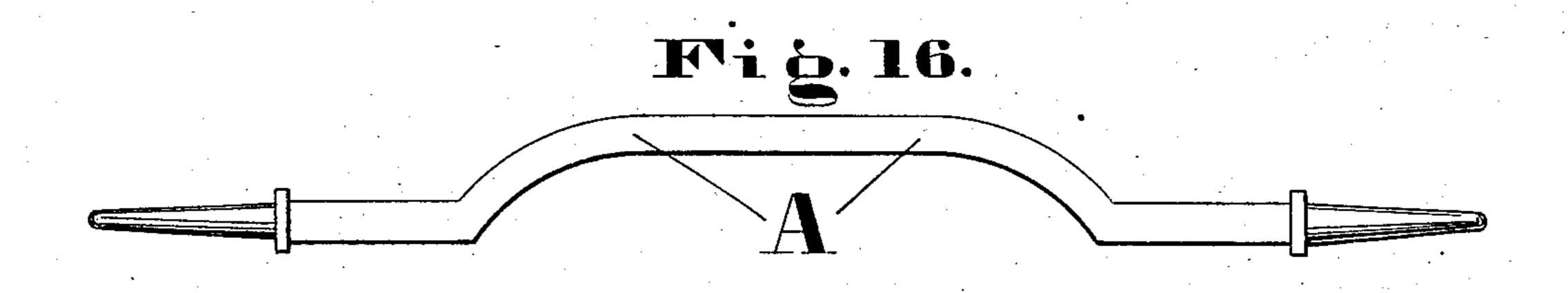
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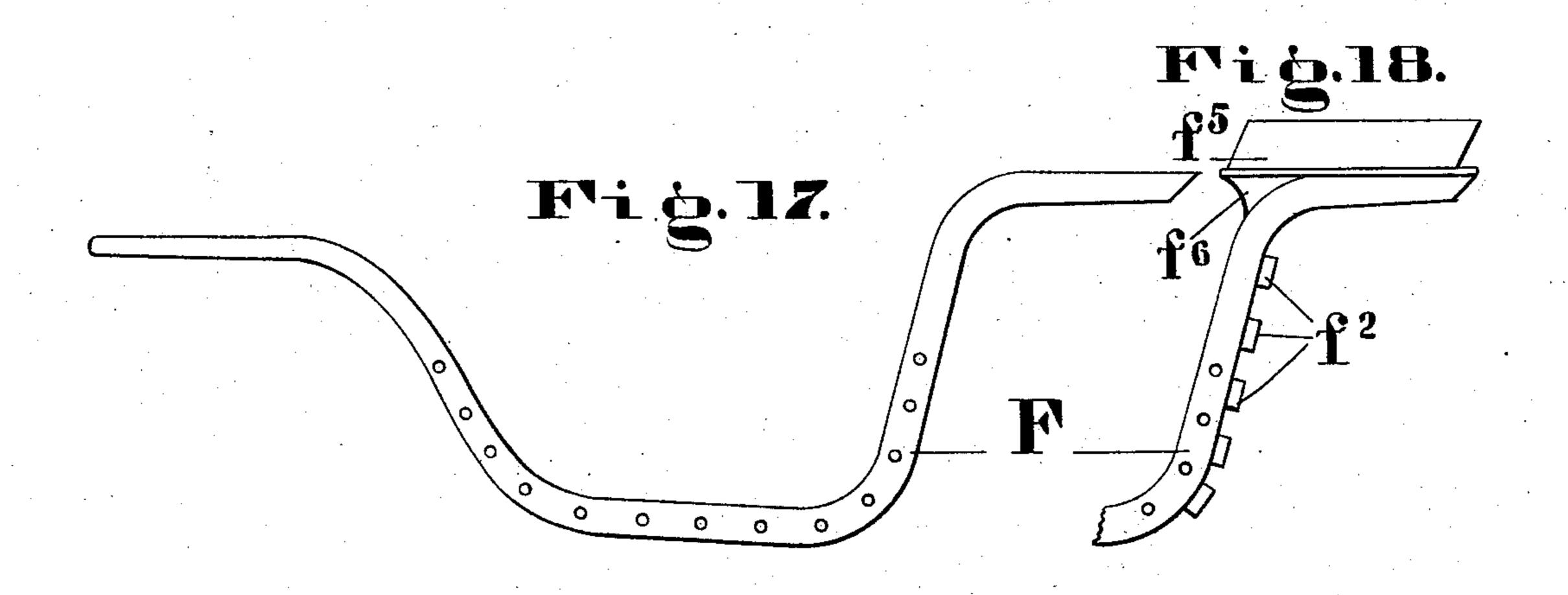
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WITNESSES: T. S. Mesh Min. J. Ennerson. PARKER WINEMAN,

BY H.W. Beade + C.

ATTY5.

United States Patent Office.

PARKER WINEMAN, OF CHICAGO, ILLINOIS.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 231,328, dated July 17, 1883.

Application filed July 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, PARKER WINEMAN, of Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Carts; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of light carts which are designed for pleasure and business; and it consists, mainly, first, in the combination, with the shafts, of a seat-arm of peculiar form, by means of which the cart is adapted for the convenient entrance of the rider into the seat and exit from the same; and, second, in the combination, with the seat-arm and axle, of a leaf-spring for supporting the rear end of the seat-arm.

It consists, further, in certain special features of construction, which, in connection with the foregoing, will be fully described hereinafter.

In the drawings, Figure 1 represents a side view of my improved cart; Fig. 2, a plan view 25 of the same; Fig. 3, a view of the rear end of one of the shafts and its attachments; Fig. 4, a view of one of the leaf-springs; Fig. 5, a partial rear view, showing the manner of attaching the leafspring and the shaft to the axle; Fig. 6, views 30 of the brace-rods C; Fig. 7, a view of the clipplate employed to connect the spring to the axle; Fig. 8, a view of the clip employed in connection therewith; Fig. 9, views of the brace-bar employed to strengthen the seat-arm; 35 Fig. 10, views of the link by means of which the free end of the leaf-spring is connected to the hook of the body portion; Fig. 11, a side view of the hook-iron secured to the body portion; Fig. 12, views of the strap by means of 40 which the front ends of the seat-arms are secured to the shaft; Fig. 13, a view of the bracerod which supports the front end of the seat; Figs. 14 and 15, views illustrating the manner of securing the spring to the body portion of

of closing in the back of the body portion.

To enable others skilled in the art to make
make my improved cart, I will proceed to describe
fully the construction of the same.

45 the cart; Fig. 16, a view of the axle detached;

Fig. 17, a view of the seat-iron detached; and

Fig. 18, a partial view, illustrating the manner

A represents the axle, preferably of bent form, as shown in Fig. 16, which is made of square iron, as shown in Figs. 1 and 3, and is supported at each end by the wheels *a a* in 55 any proper manner.

BB represent the shafts, the rear end of each of which rests upon the top of the axle, as shown in Figs. 3 and 5, and is secured thereto by the plate c of the brace-rod C, the side 60 plates, b b, having the threaded ends and nuts, as shown, and the bolts b' b', as shown.

C represents the brace bar or rod, before referred to, extending forward from the base-plate c in an inclined direction, the front end 65 of which is secured to the lower side of the shaft B by means of the threaded ends of a clip, D, as shown.

E represents a cross-bar held at its ends by the upper portion of the clips D D, as shown, 70 by means of which the shafts are properly connected together, and a proper support also is furnished for the whiffletree e, as shown.

F, Figs. 1 and 17, represents one of the seatarms, consisting of a bar of proper length, 75 which is provided at each end and in the center with a horizontal or nearly horizontal portion, and between these points with curved portions, the central portion being depressed below the end portions, as shown.

f, Fig. 2, represents a bottom board having its sides inclined inward from front to rear, by means of which these central portions are united together, and also a proper foot-support is provided when the seat-arms are in position. 85

f' represents a dash-board extending forward and upward from the front edge of the bottom board, as shown.

 $f^2 f^2$, Fig. 18, represent slats or other proper means of closing in the space between the seat- 90 arms in rear of and above the rear edge of the bottom board.

 $f^3 f^3$, Figs. 1, 2, and 9, represent brace-bars uniting the curved portion of the seat-arms, as shown.

 f^4 , Fig. 1, represents a panel of wood which is secured to the seat-arm and brace-bar in such manner as to close in the sides of the body portion, as shown.

 f^5 , Figs. 1 and 18, represents the seat secured 100 to the rear horizontal portion of the seat-arm, and f^6 a curved brace-bar extending from the

front edge of the seat to the vertical portion

of the seat-arm, as shown.

G, Figs. 1 and 12, represents a strap upon the shaft, which is provided with a projection or stud, g, adapted to extend into and through a proper recess in the front end of the seatarm, as shown.

g' represents a bolt by means of which the front end of the arm F is secured to the strap in such manner as to swing freely within cer-

tain limits.

H, Figs. 11, 14, and 15, represents an iron plate having a hook, h, as shown, which plate is strongly secured to the seat-arm and body portion near the rear corner of the latter, as shown in Fig. 1.

I, Figs. 1, 4, and 14, represents a leafspring, the bottom plate of which is bent at its large end in such manner as to inclose the

20 axle, as shown in Figs. 4 and 14.

i, Fig. 4, represents a hook or ring formed

at its free end as shown.

i', Figs. 5 and 7, represents a clip-plate, and i^2 i^2 , Figs. 5 and 8, clips by means of which 25 the spring is strongly secured to the axle, as

shown in Fig. 5.

J, Figs. 10 and 14, represents a bifurcated link or swinging piece having at one end an eye, j, and at the other end proper openings for receiving and holding the bolt j', as shown. The free end of the spring is connected to the body portion by slipping the eye j of the link over the hook h of the plate H and passing the bolt j' through the ring i of the leaf-spring, as shown in Fig. 14.

Some of the advantages of the described construction are as follows: By constructing the seat-arms with a central portion depressed below the shafts, the seat is made accessible without the necessity of stepping over the

seat-arms. By constructing the leaf-spring in the manner described—that is, with its bottom plate bent about the axle—a secure attachment is made without bringing any special strain upon the securing-clips. By connecting 45 the leaf-spring to the body portion, in the manner described, an elastic spring is obtained which will not toss the rider in passing over obstructions. By constructing the seat-arms in the shape shown, and uniting these 50 curved portions with the brace-bars, great strength is obtained with convenience of form.

I do not limit myself to the specific construction shown at the ends of the seat-arms, although this is the preferred construction. If 55 desired, the upper plate of the leaf-spring may be bent around the axle instead of the lower.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the axle A, shafts B B, and seat-arms F F, the C-springs I I, substantially as described.

2. In combination with the axle A, the spring I, having its plate surrounding the axle. 65

3. In combination with the axle A, the shafts B B, having the straps G, the seat-arms F F, the spring I, and the link for uniting the body portion to the free end of the spring.

4. In combination with the seat-arms hav- 70 ing the depressed central portion, the bracebar f^3 , uniting the curved portions and the panel f^4 , as described.

This specification signed and witnessed this

10th day of June, A. D. 1882.

PARKER WINEMAN.

Witnesses:

J. H. LUCAS, ELI T. LUCAS.